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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/735,173

12/13/2003

Luis Manuel Romo

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30176 7590
LUIS M. ROMO
56 BUCK TRAIL
HOSCHTON, GA 30548

05/30/2007

EXAMINER

BARTON, JEFFREY THOMAS

ART UNIT

PAPER NUMBER

1753

MAIL DATE

DELIVERY MODE

05/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,173

Applicant(s)

ROMO, LUIS MANUEL

Examiner

Jeffrey T. Barton

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because a fourth figure, labeled "Typical Application" is included, and should be labeled "Fig. 4". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it is presented in three paragraphs and contains a lengthy detailed description that is properly included in the

specification, not the abstract. The abstract should be rewritten to contain 1 paragraph, and no more than 150 words. Care should be taken not to introduce any new matter into the abstract. It appears to the Examiner that the first paragraph presented is a sufficient abstract. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: the specification lacks a "Brief Description of the Drawings" section and a "Detailed Description" section, which are required. It is noted that the substitute specification filed on 2 April 2004 omits the original "Description of Drawings" and "Detailed Description" sections. (i.e. Pages 3-5 of the original specification filed 13 December 2003) Applicant should submit a new substitute specification including all sections, double-spaced. No new matter should be added to the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35

U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

6. Claim 2 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

7. Claims 4, 5, and 7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As stated in 35 U.S.C. §101, patents are granted for processes, machines, manufactures, or compositions of matter. "Manufacturing advantage", "Installation versatility", and "Combined and or individual advantage" do not correspond to any of these classes. These headings appear to correspond more to Applicant's opinion of the subject matter of the application than to a definition of the subject matter. The claims should be rewritten with preambles such as "A process comprising", "A device comprising", "An apparatus comprising", or the like.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 provides for the use of photovoltaic and electroluminescent materials, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 2 provides for the use of materials in modular and incremental lengths, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. In addition, the recitation of "such materials" in claim 2 is indefinite because there is no clear statement of what materials are specifically being referenced.

Claim 3 appears to be an improperly formatted method claim, requiring carrying or containing of photovoltaic-electroluminescent material. As a first matter, a proper format for method claims is, for example "A process comprising the step of carrying or containing . . ." or "A process for carrying or containing a photovoltaic-electroluminescent material comprising . . ." or the like. In addition to the format, there is no clear antecedent basis for "the photovoltaic-electroluminescent materials". Also, statement of "the use of . . . materials" does not constitute a clearly recited method

step. Perhaps limitation to depositing the photovoltaic and electroluminescent materials on transparent or translucent materials would be appropriate.

Claim 4 includes a parenthetical expression, "(Cut to length.)" which renders the claim scope indefinite, because it is unclear whether the structure must be cut to length, or whether this is simply exemplary. In addition, it is unclear what is meant by the term, "linearly produced".

Claim 5 refers to "the combinations", with no recitation of any combination. The recitation of "similar fixtures" is unclear because it is not clear to what the fixtures must be similar, or how "similar" they must be to such an item. There is no disclosure in the instant application that would allow the Examiner to decipher what is meant by a "top-flat or top-finned electronic control box", what fixtures might be received by such a control box, what are intended by "cross stacking arrangements", or what would correspond to "no customized cost". These recitations are completely unclear, and examination of this claim on the merits is impossible.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. (i.e. it refers to "the different described elements") The claim must distinctly recite the structure to which the claim is limited, and not include such vague references to the entire disclosure.

Claim 7 is unclear in that it seeks to apply an "advantage" of the instant invention to "similar applications" and "different fields". There is no basis at all for determining what might be a "similar application" or "different field", making the claim indefinite. The

list of "i.e. agricultural, medical . . . et al." likewise renders the claim indefinite, because it is unclear whether one, some, or all of the fields are required, and the inclusion of "et al." is inherently indefinite, as it includes additional unnamed items.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Although no instant claims are definite, and claims 1, 2, 4, 5, and 7 do not correspond to statutory subject matter, these references appear to correspond to much of the subject matter of the claims. As noted in the rejection under 35 U.S.C. §112, second paragraph above, meaningful examination of claim 5 on the merits is impossible.

12. Claims 1-4, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Murasko et al. (US 2002/0159245)

Regarding claim 1, Murasko et al disclose using photovoltaic and electroluminescent materials on different planes of a substrate. (Figure 2; Substrate 202; photovoltaic cells 208, electroluminescent devices 206 ; Paragraph 0025)

Regarding claim 2, the module of Figure 2 of Murasko et al will have a finite length, which will correspond to a "modular" length.

Regarding claim 3, the substrate 202 of Murasko et al can be transparent or translucent (Paragraph 0025), the planar form of cells 206 and EL device 208 in Figure 2 would correspond to the "linear form" of the claim.

Regarding claim 4, the embodiment of Figures 3 and 4 of Murasko et al clearly demonstrate custom match of the EL device (302) and photovoltaic device (304) dimensions to the requirements of one application. (i.e. sizing of the cell atop a stop sign; fitting the EL device around the perimeter of the stop sign)

Regarding claim 6, Figures 2-4 demonstrate an illumination system that uses clean energy and is environmentally friendly, inasmuch as it uses photovoltaic power generation. The photovoltaic and electroluminescent materials used correspond to the claimed structural combination.

Regarding claim 7, Murasko et al disclose an automotive application of the photovoltaic/electroluminescent devices they disclose. (Figures 6-8; Paragraphs 0039-0046)

13. Claims 1-4, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Green et al. (US 5,782,552)

Regarding claim 1, Green et al disclose using photovoltaic and electroluminescent materials deposited on different planes of a substrate. (Figures 1 and 2, LEDs 3, solar cell 2, deposited on a protective shell. (Column 2, lines 26-33)

Regarding claim 2, the lengths of LEDs 3 and cell 4 correspond to "modular", in that the items are incorporated in a module, as illustrated in Figures 1 and 2.

Regarding claim 3, LEDs 3 and cell 2 are supported by a transparent material. (Column 3, lines 10-18) The planar form of cell 2 and linear form of LEDs 3 in Figures 1 and 2 correspond to the "linear form" of the claim.

Regarding claim 4, sizing of the device of Figures 1 and 2 to serve as a road marker corresponds to custom match of the dimensions for the application. (Column 3, lines 8-9)

Regarding claim 6, Green et al demonstrate an illumination system (Figures 1 and 2) that uses clean energy and is environmentally friendly, inasmuch as it uses photovoltaic power generation. The photovoltaic and electroluminescent materials used correspond to the claimed structural combination.

Regarding claim 7, the road marker embodiment disclosed by Green et al corresponds to an automotive and/or industrial application of the photovoltaic/electroluminescent devices they disclose. (Figures 1-2; Column 3, lines 8-9)


Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey T. Barton whose telephone number is (571) 272-1307. The examiner can normally be reached on M-F 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTB
25 May 2007


NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700